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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|----------------------|---------------------|------------------|
| 10/671,884 | 09/29/2003 | Kelly Shoemake | 005242.00133 | 5371 |
| 22907 | 7590 04/27/2006 | | EXAMINER | |
| BANNER & WITCOFF | | | MATZEK, MATTHEW D | |
| 1001 G STREET N W SUITE 1100 WASHINGTON, DC 20001 | | | ART UNIT | PAPER NUMBER |
| | | | 1771 | |

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | • |
|--|---|---|----------|
| | 10/671,884 | SHOEMAKE ET AL. | |
| Office Action Summary | Examiner | Art Unit | |
| | Matthew D. Matzek | 1771 | |
| The MAILING DATE of this communication a Period for Reply | appears on the cover sheet wi | th the correspondence address | - |
| A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perions. - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNIC 1.136(a). In no event, however, may a re- od will apply and will expire SIX (6) MON tute, cause the application to become AB | CATION. apply be timely filed THS from the mailing date of this communi ANDONED (35 U.S.C. § 133). | |
| Status | | • | |
| 1) Responsive to communication(s) filed on <u>06</u> | February 2006. | | |
| · ·— | his action is non-final. | | • |
| 3) Since this application is in condition for allow | | | its is |
| closed in accordance with the practice unde | r Ex parte Quayle, 1935 C.D | . 11, 453 O.G. 213. | |
| Disposition of Claims | | • | |
| 4) ☐ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) 1-6 and 14-20 is/are 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 7-13 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and | re withdrawn from considera | tion. | |
| Application Papers | | | • |
| 9) The specification is objected to by the Exami | iner. | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ a | ccepted or b) objected to | by the Examiner. | |
| Applicant may not request that any objection to the | he drawing(s) be held in abeyan | ce. See 37 CFR 1.85(a). | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the | | | |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documed 2. Certified copies of the priority documed 3. Copies of the certified copies of the priority documed application from the International Bured* See the attached detailed Office action for a life | ents have been received. ents have been received in A riority documents have been eau (PCT Rule 17.2(a)). | pplication No received in this National Stag | e |
| | • | | |
| Attachment(s) | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview S | Summary (PTO-413) | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date | Paper No(s | s)/Mail Date nformal Patent Application (PTO-152) | |

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Response to Amendment

- 1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. The previously applied rejections have been withdrawn as they failed to teach a fiber mat with a ureaformaldehyde resin modified with a protein in an amount of 0.1% to 10% by weight of resin and protein solids. Claims 1-20 are currently pending, but claims 1-6 and 14-20 have been withdrawn from prosecution.
- 2. In view of the Appeal Brief filed on 2/6/2006, PROSECUTION IS HEREBY REOPENED. As set forth below.
- 3. To avoid abandonment of the application, appellant must exercise one of the following two options:
- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.
- 4. A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

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Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 7-9 and 11-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Belmares et al. (US 2003/0099850).

Belmares et al. teach the creation of a low formaldehyde emission binder based upon a formaldehyde-based resin that reduces sag and enhances strength (Abstract). Soy protein (formaldehyde scavenger) is added to the urea formaldehyde (UF) binder to control the formaldehyde emissions [0011]. The binder of Belmares et al. may be used to bind fiberglass [0015]. The effective range of the formaldehyde scavenger is from about 3% to about 40% based upon the weigh of the UF binder [0023].

Claim Rejections - 35 USC § 103

- 6. Claims 7-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (US 6,384,116) in further view of Belmares et al. (US 2003/0099850).
 - a. Chan et al. teach the use of a binder composition comprising urea-formaldehyde modified with a water-soluble non-ionic amine oxide and optionally further modified with an anionic acrylic latex (Abstract). The applied invention is to be used for glass fiber mats and results in improved tensile strength of said mats (Abstract). The glass mats are to be used as a roofing product (col. 1, lines 31-36). Glass fiber mats are

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generally made by a wet-laid nonwoven process (col. 1, lines 32-40). Chan et al. are silent as to the use of a formaldehyde scavenger such as soy protein.

- b. Belmares et al. teach the creation of a low formaldehyde emission binder based upon a formaldehyde-based resin that reduces sag and enhances strength (Abstract). Soy protein (formaldehyde scavenger) is added to the urea formaldehyde (UF) binder to control the formaldehyde emissions [0011]. The binder of Belmares et al. may be used to bind fiberglass [0015]. The effective range of the formaldehyde scavenger is from about 3% to about 40% based upon the weigh of the UF binder [0023].
- c. Since Belmares et al. and Chan et al. are from the same field of endeavor, (i.e. glass fiber mats bound by formaldehyde-based resins) the purpose disclosed by Belmares et al. would have been recognized in the art of Chan et al.
- d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have modify the adhesive of Chan et al. with the formaldehyde scavenger of Belmares et al. The skilled artisan would have motivated by the desire to reduce the amount of formaldehyde emitted by the fibrous article [0019, Belmares et al.].
- 4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belmares et al. (US 2003/0099850) as applied to claim 9 above, and further in view of Trocino (WO 01/59026). Belmares et al. is silent as to the type of soy protein to be used in the applied invention.
 - a. Trocino discloses a vegetable protein-based adhesive composition comprising soy protein made from soy meal (soy flour) (Abstract). Example 1 teaches a binder formulation comprising soymeal and urea-formaldehyde.

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b. Since Belmares et al. and Trocino are from the same field of endeavor (i.e. soy protein binders for use in the construction of fiberboard panels) the purpose disclosed by

Trocino would have been recognized in the pertinent art of Belmares et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the adhesive composition of Belmares et al. with the soy flour of Trocino motivated by the fact that soy meal is low in cost and is readily

available.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423.

The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdm

May

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